

SBSnet

Datasheet

Hardware Installation Guide

Software Installation Guide

Operating Manual

Datasheet

Device characteristics

Operating temperature range	0°C to 70°C
Storage temperature range	-40°C to 85°C
Input voltage	+5V +- 5% DC, stabilized
Supply current without SBS-1 supplied	300 mA @ 10-Base-T 260 mA @ 100-Base-T
with SBS-1 supplied	ca. 630 mA @ 10-Base-T ca. 590 mA @ 100-Base-T

Connectors

RJ45 Ethernet	10/100 MBit/s
USB	Type A
Power supply	5.5 x 2.1 x 10mm PSU jack

Indicators

LED left*	Ethernet link
LED right *	Ethernet activity

*part of the Xport device

LED upper	on=USB awaiting setup
LED lower	on=Setup mode
During normal operations both LEDs shall be off.	

MAC device number (can be entered manually here)

00 - 20 - 4A - ____ - ____ - ____

(Label on SBSnet shows last three numbers only)

SBSnet

Hardware Installation Guide

Wiring your SBSnet adapter

Typical configurations

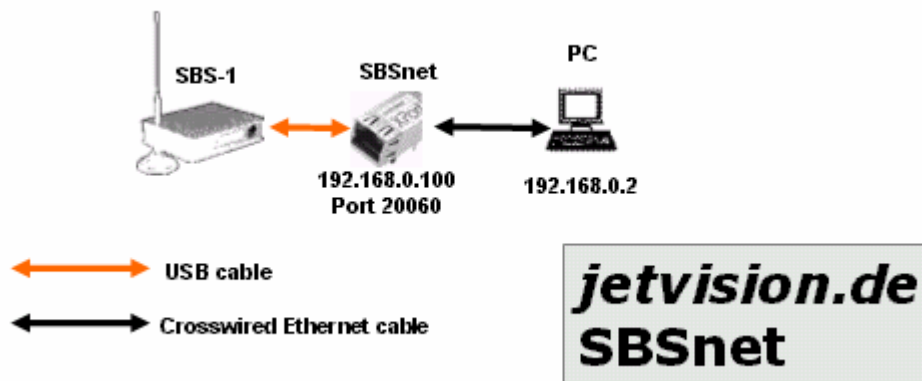
- **Standalone configuration**

Useful, if your current USB line is long or uses a USB extender set and produces blank screen errors in Basestation due to USB line failures

Requirements:

- SBS-1, PC
- SBSnet adapter
- PSU supply to SBSnet adapter
- Mains supply outlet close to PSU adapter
- Crosswired ethernet cable CAT 5 or superior
- USB cable

Setup example:



- **Hub/switch configuration**

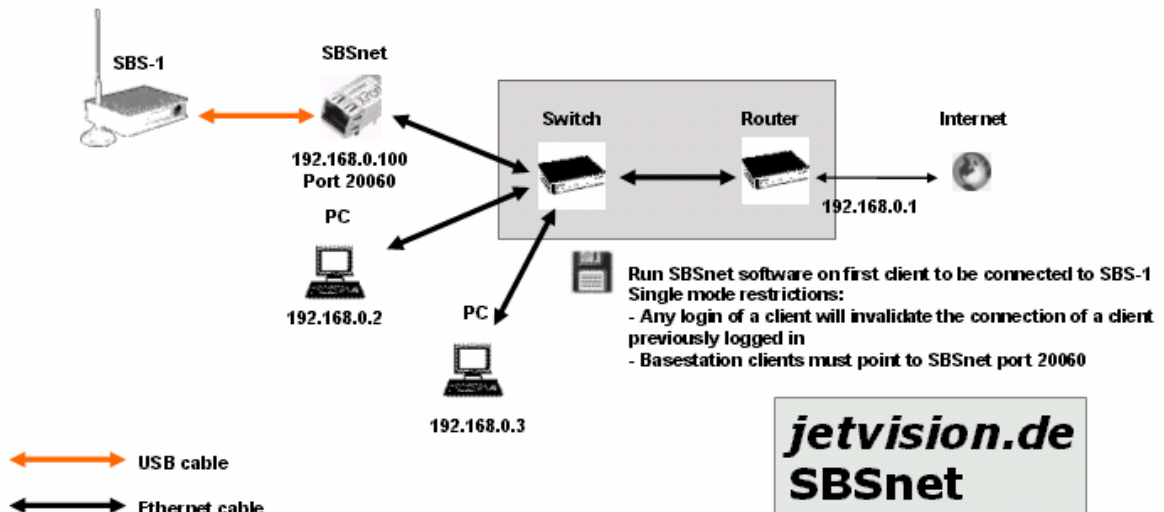
Useful, if you want to access your SBS-1 adapter from different computers (one at a time, multiple access requires SBSserver software) from a local area network or the internet. Also useful, if you want to run Basestation via a wireless network link.

- SBS-1, PC
- SBSnet adapter
- PSU supply to SBSnet adapter
- Mains supply outlet close to PSU adapter
- Network hub or switch*
- Network router* (if internet access is desired)
- Wireless access point (if wireless access is desired)
- Ethernet cable CAT 5 or higher
- USB cable

*Router and switch are combined with the DSL or Cable modem in many newer devices

Setup example:

Single client setup with SBSnet - only one PC client can be connected at a time (either 192.168.0.2 or 0.3 or Internet through the router in this example)

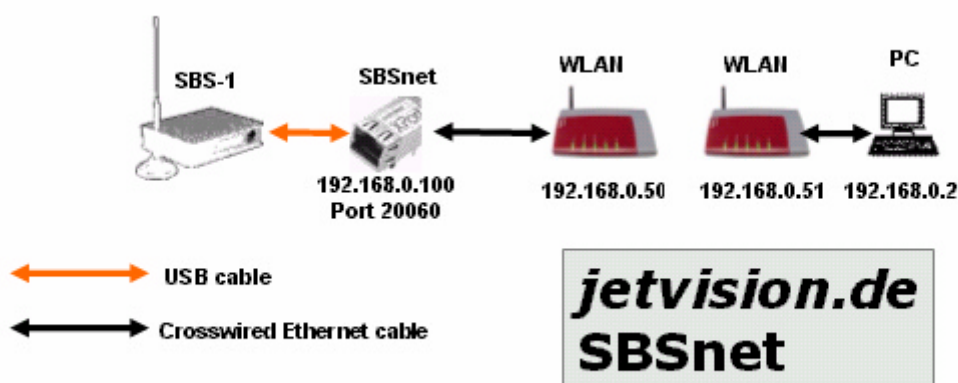


• Attic configuration

Useful, if you cannot run an Ethernet cable from the SBS-1 location in the attic to your PC or network installation; you need a mains supply in range, however, to power the SBSnet adapter

- SBS-1, PC
- SBSnet adapter
- PSU supply to SBSnet adapter
- Mains supply outlet close to PSU adapter
- Wireless bridge in ad-hoc mode
- Crosswired Ethernet cable CAT 5 or higher
- USB cable

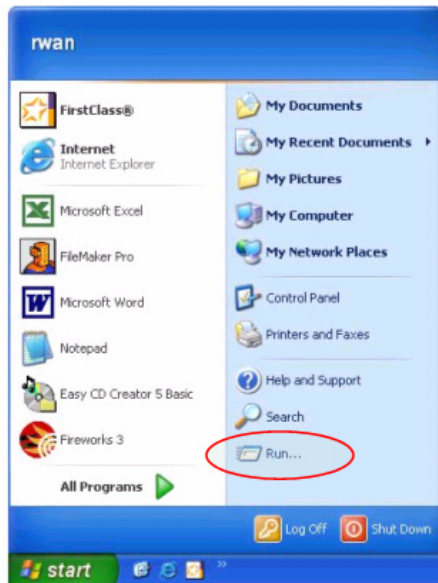
Setup example:



Find a free IP address in your private network

If you know how to find a free network IP on your network you may skip this chapter

Open your Windows start menu and click on RUN...



A dialog will appear, now enter CMD and press OK. (for Win 98 and 2k enter COMMAND instead)

A DOS window box will appear with a command prompt. Behind the prompt you enter: IPCONFIG and then press return.

Now a listing of available network devices on your computer will appear, much like this:

```
C:\WINNT\System32\command.com
Microsoft(R) Windows DOS
(C)Copyright Microsoft Corp 1990-1999.

Z:\>ipconfig

Windows 2000 IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . . : 134.114.70.143
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 134.114.70.1

Z:\>_
```

In this case your computer has received a network IP of 134.114.70.143. You should assign to your SBSnet adapter an IP in the range of 134.114.70.2 to 134.114.70.254, except for 134.114.70.143.

If you are not sure whether a network IP is used by another computer you can run another command from the console window. E.g. if you have decided to use 134.114.70.222 for your SBSnet adapter then enter PING 134.114.70.222 and press return. If there is a time out, then that IP is not used. If a response time is given then the IP cannot be used for SBSnet.

Once you have decided on a private IP for SBSnet send it with your order.

Configure an IP address

Your SBSnet adapter comes pre-configured with an IP address suited for your network configuration, if you had requested so. **In this case no further configuration action is required and you may continue with the Software Installation.**

If you have not requested a specific IP address your SBSnet adapter comes with the following network data

IP: 192.168.2.222
Mask: 255.255.255.0
Gateway: 192.168.2.1

To change these settings or if you require a different Mask from 255.255.255.0 then proceed as follows:

- Assign a network IP of 192.168.2.100 (temporarily) to a Windows computer. This can be done through the Network connections| Properties dialog of Windows
- Connect your SBSnet adapter with a crosswired Ethernet cable or through a hub or switch to that computer
- Go to your Internet Browser and open <http://192.168.2.222>
- When a password dialog appears press OK
- Go to page NETWORK
- Change the IP settings to your desired IP as shown below:

LANTRONIX®

Firmware Version: **V6.5.0.3**

MAC Address: [REDACTED]

Network Settings

1 **Network**

Server

Serial Tunnel

Hostlist

Channel 1

Serial Settings

Connection

Email

Trigger 1

Trigger 2

Trigger 3

Configurable Pins

4 **Apply Settings**

Apply Factory Defaults

IP Configuration

☐ Obtain IP address automatically

Auto Configuration Methods

BOOTP: ☒ Enable ☐ Disable

DHCP: ☒ Enable ☐ Disable

AutoIP: ☒ Enable ☐ Disable

DHCP Host Name: [REDACTED]

☒ Use the following IP configuration:

IP Address: [192.168.2.222] **2**

Subnet Mask: [255.255.255.0]

Default Gateway: [192.168.2.1]

Ethernet Configuration

☒ Auto Negotiate

Speed: ☒ 100 Mbps ☐ 10 Mbps

Duplex: ☒ Full ☐ Half

3 OK

- Click OK
- Click APPLY SETTINGS
- Restore the original IP on your computer

SBSnet

Software Installation Guide

jetvision.de (c) 2007

Installation

Please download the SBSnet device driver from <http://jetvision.de/sbs/sbsnet/sbsnet.zip>

Unzip the file "sbsnet.exe" to your BASESTATION folder, i.e. the folder where the file "basestation.exe" is present.

Shutdown Basestation.

Run "sbsnet.exe"

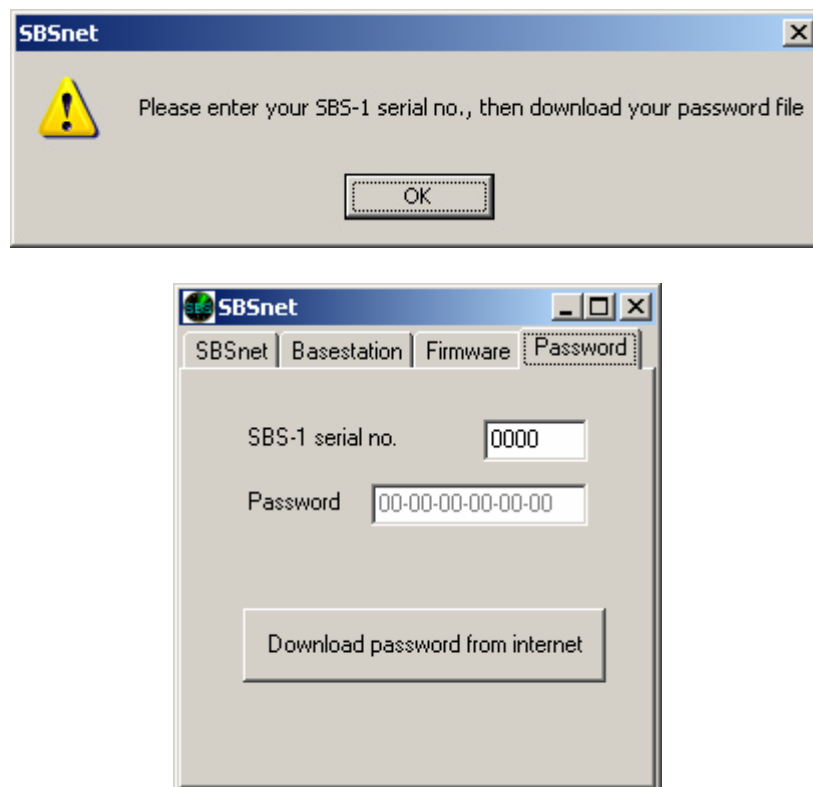
Activation and Setup

You need to enter your SBS-1 serial no. into SBSnet, because there are two variations of SBS-1 boxes around that require different data handling.

Also you need to download a password file as the license for this software is linked to a specific SBSnet serial no.

(You can use the pair of SBSnet adapter and device driver on other SBS-1 boxes later, but it is imperative that the SBS-1 serial no. is entered correctly at any time of operation).

You will see these dialogs when you start for the first time:



Enter your SBS-1 serial no. exactly as it is labeled on the SBS-1 box (i.e. 4 digits). **You must have an active internet connection to continue.**

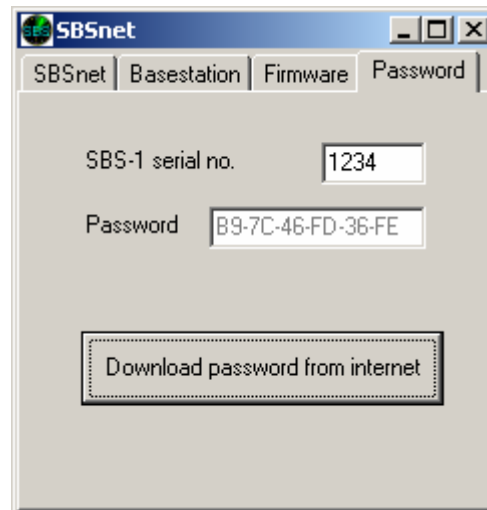
Press DOWNLOAD PASSWORD FROM INTERNET.

Wait until a confirmation dialog appears and press OK.

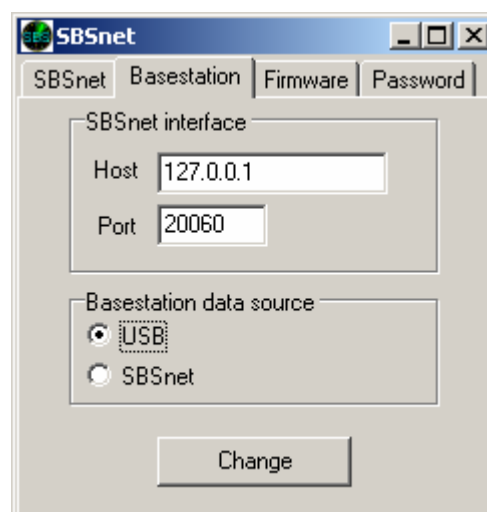
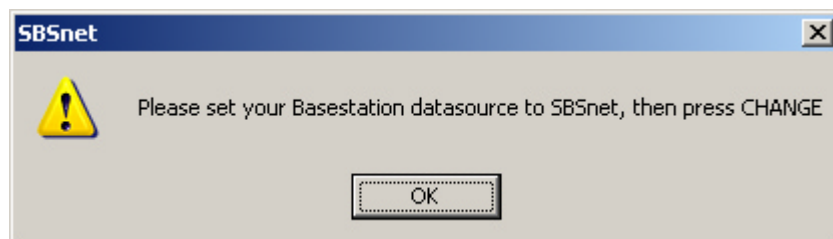
If an error occurs please contact support.sbsnet@jetvision.de

(The web interface does not transmit any data to the internet. However, if you do not want to use the built-in web interface you can manually download the license file from <http://jetvision.de/sbs/sbsnet/pwf/1234.pwf> (where 1234 is substituted by your serial no.) and save it under the Basestation folder. Then restart SBSnet and continue as below)

The dialog should now be filled with the password and look similar to this picture:



You may get this message when trying to change tabs. For now continue with tab BASESTATION:

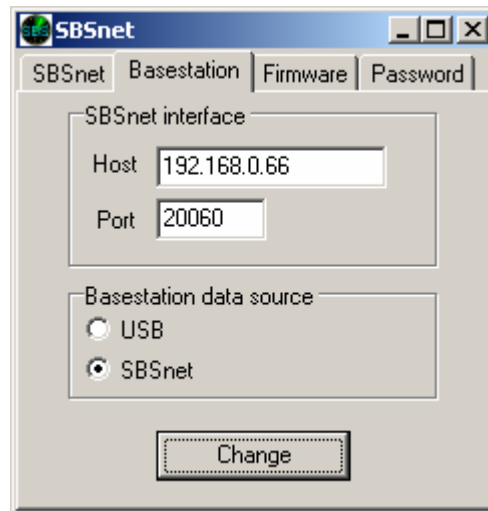


The tab will probably look like this. These data are loaded from "basestation.ini" and you can change that file from here, so there is no need to edit it with a text editor. You can also toggle between USB and SBSnet operation, which comes into effect only after you have restarted Basestation.

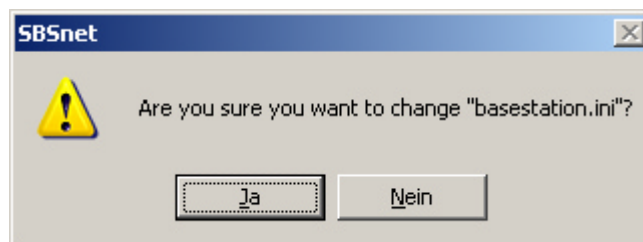
Important:

You must have assigned your SBSnet adapter an IP before you can continue - see Hardware Installation Guide.

Please select SBSnet and enter the IP (e.g. 192.168.0.66) that you had assigned before to your SBSnet adapter or a host address (e.g. sbs1.myweb.org) that can be resolved. Leave the port address at 20060. After these changes the dialog should look like this:



Then press CHANGE and answer with YES.



Your activation and setup process is completed now.

SBSnet

Operating Manual

When the activation and setup process was completed, only the following steps must be performed **after every cold start of the SBS-1 box.**

(As long as the SBS-1 box is powered and was properly initialized (i.e. the green SBS-1 LED is on) there is no need to repeat the initialization even when Basestation is shutdown and restarted.)

Press INIT SETUP.

The SBSnet adapter and the SBS-1 USB interface will now become initialized. This process should take not more than 30 seconds. It will be quicker inside a local area network, but may take longer if accessed through the internet. When it says INIT COMPLETED then...

Press START BASESTATION.

Basestation will start as usual and the green SBS-1 LED should go on after around 10-20 seconds.

When EXIT AFTER START is checked, the device driver software will automatically shutdown now. Otherwise you can minimize it to the system tray.

